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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,744	10/19/2001	Dong Wan Ryoo	P67235US0	6169

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EXAMINER

TORRES, JOSEPH D

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

4

Office Action Summary

Application No.

09/981,744

Applicant(s)

RYOO ET AL.

Examiner

Joseph D. Torres

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The proposed drawing correction filed 07 June 2004 is approved. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

2. Claims 1 and 8 recite, "and in the case of a channel for generating a failure signal due to an instantaneous noise, transmitting an initialization signal to cancel a failure detection signal". The Examiner recognizes that the same language is used in the paragraphs starting in line 2 and line 15 of page 7 of the Applicant's specification. However the paragraphs starting in line 2 and line 15 of page 7 of the Applicant's specification do not appear to have any connection to the circuitry of Figure 2 in the Applicant's disclosure being discussed in the rest of the Specification. For example, the terms "initialization", "failure detection signal", "initialization signal" and "instantaneous noise" are only used in line 2 and line 15 of page 7 of the Applicant's specification and hence fail to have any meaningful connection to the circuitry of Figure 2 in the Applicant's disclosure that the Applicant is attempting to claim in claims 1 and 8. In other words, there is not information in the patent so that one of ordinary skill in the art

Art Unit: 2133

at the time the invention was made would have known what connection the paragraphs starting in line 2 and line 15 of page 7 of the Applicant's specification has with the circuitry of Figure 2 in the Applicant's disclosure being discussed in the rest of the Specification in order to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-6 and 8-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1 and 8 recite, "and in the case of a channel for generating a failure signal due to an instantaneous noise, transmitting an initialization signal to cancel a failure detection signal". The Examiner recognizes that the same language is used in the paragraphs starting in line 2 and line 15 of page 7 of the Applicant's specification. However the paragraphs starting in line 2 and line 15 of page 7 of the Applicant's specification do not appear to have any connection to the circuitry of Figure 2 in the Applicant's disclosure being discussed in the rest of the Specification. For example, the terms "initialization", "failure detection signal", "initialization signal" and "instantaneous

noise” are only used in line 2 and line 15 of page 7 of the Applicant’s specification and hence fail to have any meaningful connection to the circuitry of Figure 2 in the Applicant’s disclosure that the Applicant is attempting to claim in claims 1 and 8. In other words, there is not information in the patent so that one of ordinary skill in the art at the time the invention was made would have known what connection the paragraphs starting in line 2 and line 15 of page 7 of the Applicant’s specification has with the circuitry of Figure 2 in the Applicant’s disclosure being discussed in the rest of the Specification in order to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-6 and 8-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 8 substantially recite, “comparing means for comparing the signals respectively received in the number of channels of the system board through digital operation and finding a failed channel output information of the failed channel, and in the case of a channel for generating a failure signal due to an instantaneous noise, transmitting an initialization signal to cancel a failure detection signal”. The recited phrase replete with grammatical problems some of which, the Examiner discusses below. It is not clear whether “for generating a failure signal” refers to the “comparing

means” or the “channel”, i.e., does the Applicant mean --comparing means for generating a failure signal-- or --a channel for generating a failure signal--?

Claims 1 and 8 recite, “and in the case of a channel for generating a failure signal due to an instantaneous noise, transmitting an initialization signal to cancel a failure detection signal”, which is grammatically incoherent. The Examiner suggest that if the Applicant is having problems with the English language that the Applicant enlist the services of a professional translator.

Claims 1 and 8 substantially recite, “carrying out a feedback of a signal same as signals of other channels”, which is grammatically incoherent. The Examiner suggest that if the Applicant is having problems with the English language that the Applicant enlist the services of a professional translator.

Claims 1-6 and 8-13 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. Claims 1 and 8 substantially recite, “comparing means for comparing the signals respectively received in the number of channels of the system board through digital operation and finding a failed channel output information of the failed channel, and in the case of a channel for generating a failure signal due to an instantaneous noise, transmitting an initialization signal to cancel a failure detection signal”. The omitted structural cooperative relationships are: the relationship between a channel (“in the case of a channel for generating a failure signal”) and a “failed channel”.

There is no logical connection between the "failure detection signal", "initialization signal" and "instantaneous noise" to the circuitry that the Applicant is attempting to claim in claims 1 and 8.

Response to Arguments

5. Applicant's arguments filed 03/11/2005 have been fully considered but they are not persuasive.

The Applicant contends that the following newly added claim language is not taught in the Prior Art of Record, "and in the case of a channel for generating a failure signal due to an instantaneous noise, transmitting an initialization signal to cancel a failure detection signal".

The abstract in Nurmohamed teaches a voter circuit for eliminating transients.

Transients are faults due to instantaneous noise. Monitoring Circuit 16 in Figure 1 generates initialization signals 17-19 for setting switches in Figure 1 to cancel previous switch configurations responsive to detection of failures.

The Examiner disagrees with the applicant and maintains all rejections of claims 1-6 and 8-13 (Note: Claims 8-13 respectively recite all the limitations as in claims 1-6, whereby the judging means is a voter circuit as taught in Nurmohamed). All amendments and arguments by the applicant have been considered. It is the Examiner's conclusion that claims 1-6 and 8-13 are not patentably distinct or non-

obvious over the prior art of record in view of the reference, Nurmohamed; Amin Mulji et al. (US 3725818 A, hereafter referred to as Nurmohamed) as applied in the last office action, Paper No. 4 (filed 09 March 2004). Therefore, the rejection is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 1-6 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nurmohamed; Amin Mulji et al. (US 3725818 A, hereafter referred to as Nurmohamed).

See Paper No. 4 (filed 09 March 2004) for detailed action of prior rejections (Note: Claims 8-13 respectively recite all the limitations as in claims 1-6, whereby the judging means is a voter circuit as taught in Nurmohamed).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOSEPH D. TORRES
PRIMARY EXAMINER

Joseph D. Torres, PhD
Primary Examiner
Art Unit 2133